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# Dairy Production

Issued Monthly by

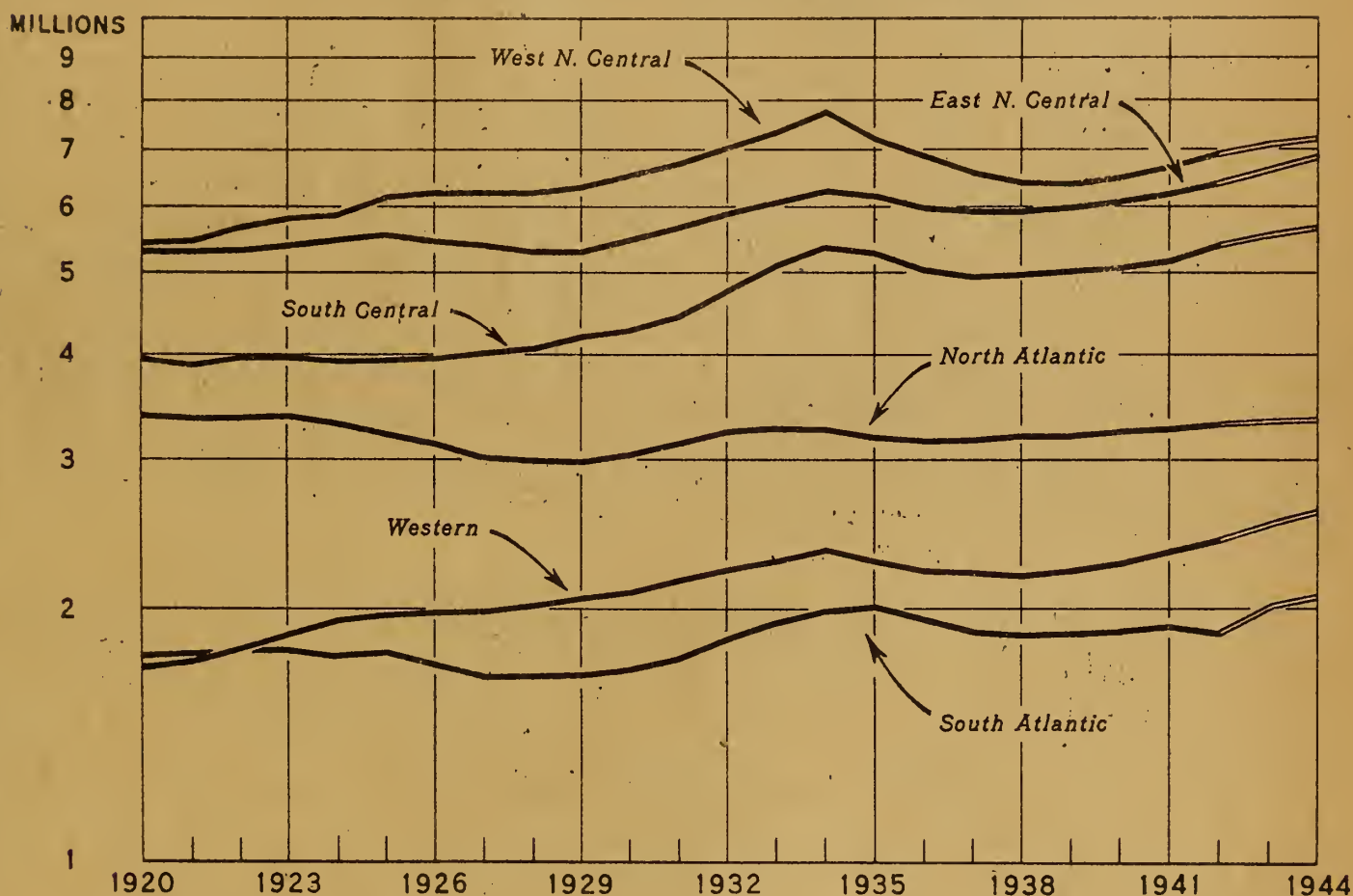
BUREAU OF AGRICULTURAL ECONOMICS  
UNITED STATES DEPARTMENT OF AGRICULTURE

No. 24



APRIL 16, 1942

## MILK COWS ON FARMS JANUARY 1, 1920-42, AND INDICATIONS FOR 1943-44



U. S. DEPARTMENT OF AGRICULTURE

NEG. 42093 BUREAU OF AGRICULTURAL ECONOMICS

DURING 1941 THE NUMBER OF MILK COWS INCREASED MORE THAN 3 PERCENT AND ENOUGH HEIFERS ARE BEING RAISED TO PERMIT SIMILAR INCREASES THIS YEAR AND NEXT YEAR IF COWS ARE CULLED OUT AT THE USUAL RATE. RECENTLY, HOWEVER, THE RATE OF CULLING HAS INCREASED DUE TO THE MORE FAVORABLE PRICES OF HOGS, BEEF CATTLE AND OTHER FARM PRODUCTS WHICH COMPETE WITH DAIRYING IN GENERAL FARMING AREAS. IN THE NORTH ATLANTIC STATES AND PROBABLY IN SOME AREAS ELSEWHERE LABOR CONDITIONS ON THE FARMS ARE ALSO TENDING TO RESTRICT EXPANSION OF DAIRY HERDS. IN THE SPECIALIZED DAIRY MANUFACTURING AREAS IN THE NORTH CENTRAL STATES, ON THE PACIFIC COAST AND IN SOME FAVORED SECTIONS OF THE SOUTH THE RAPID EXPANSION OF DAIRY HERDS IS EXPECTED TO CONTINUE FOR THE PRESENT. IN THE COUNTRY AS A WHOLE THE INCREASES THIS YEAR AND NEXT NOW SEEM LIKELY TO BE 2 TO 3 PERCENT. DETAILS BY GROUPS OF STATES ARE SHOWN ON PAGE 8.



## DAIRY PRODUCTION SUMMARY

Milk production through March continued at about the same relative level as in recent months--about 4 percent above production in the corresponding period of last year. The increase in production results from 3 percent more cows and 1 percent more milk per cow. Mild weather in March helped to maintain high production in the principal northern dairy States. Cool weather and retarded pastures partially explain the lower tendencies in the West and Southwest.

Daily milk production per cow as reported by crop correspondents on both March 1 and April 1 was about 1 pound above the 5-year average for the date and on each date the quantity of grain fed by dairymen was about .9 pound per cow above the average. Apparently production per cow has been increased to a point where additional production can be secured only at high feed cost per unit.

Milk production may continue heavy for some time if feed supplies continue abundant and if prices of dairy products are high enough to cause farmers to continue to feed liberally and to increase their herds. On the other hand, milk production would be affected rather quickly if farmers begin to divert feed or efforts to other livestock. Present farm supplies of feed grain per unit of livestock are large, about equal to the average at this season during the last four years but larger than in April of other years since perhaps 1921. Prospects for pastures and for feed production are outstandingly favorable. Prospects for prices more favorable for dairymen than for producers of livestock and poultry are very uncertain because price policies and war-time needs are not yet determined. The recent increase in the price of butter raises the average of dairy products somewhat, but, judging from recent changes in market prices, butterfat is still cheaper in comparison with hogs than in any April since 1918. Farmers, judging relative needs by prices, are increasing hogs. In part of the Corn Belt hogs compete with cows. The number of cows marketed appears to have increased. The records do not show how many of the cows being marketed are milk cows or of dairy breeding but in February the total of all cows and heifers slaughtered under Federal Inspection was the largest for the month on record.

The total production of manufactured dairy products in March was about 6 percent above production in the same month last year --the 53 percent increase in cheese and a large increase in evaporated milk were partially offset by an 8 percent decrease in creamery butter. Production of the various dairy products is gradually becoming more closely adjusted to war demand conditions. With the production of American cheese and evaporated milk nearly twice as great as the 5-year (1936-40) average for the same months, the increases in production are being closely balanced by Government purchases. Recently Government purchases of dry skim milk have been increasing rapidly.

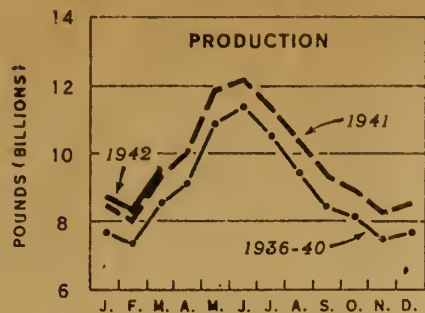
Stocks of dairy products exceed usual holdings at this time of year, but, except for about a week's supply of butter, the excess of supplies is chiefly in Government hands.

Prices of dairy products in mid-April reflect the recent increase in the Government's buying price of butter and the less-than-usual seasonal declines in the prices of most other dairy products. With the more urgent war-time needs being supplied, prices of the various dairy products have shifted further towards their usual relation to each other. Prices of cheese, evaporated milk, and dry skim milk are still high compared with butter and market milk and may continue high for some time although it is in the areas producing these products that the most rapid increase in the number of cows is expected to take place. The price of market milk, which declined less during the depression than did the prices of most dairy products, has recently risen less.

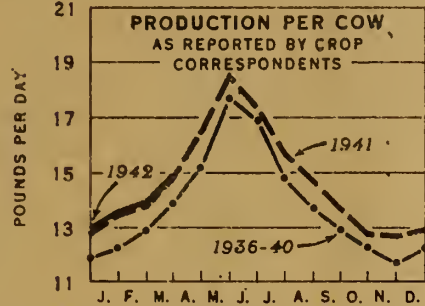


# DAIRY STATISTICS: GRAPHIC SUMMARY FOR THE UNITED STATES

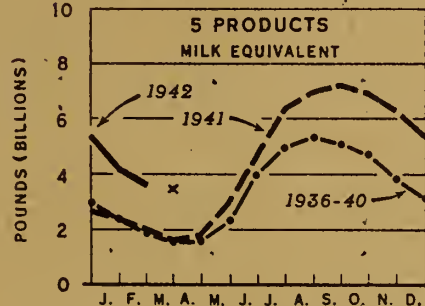
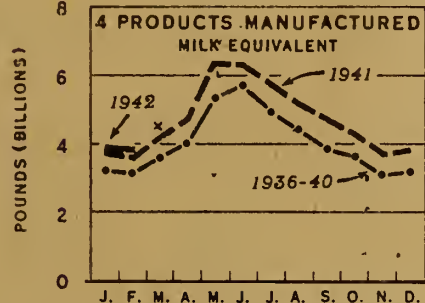
## MILK PRODUCTION ON FARMS



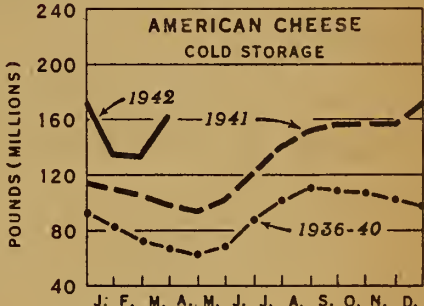
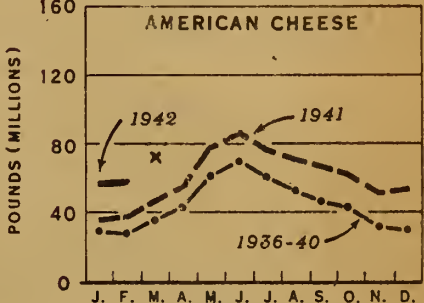
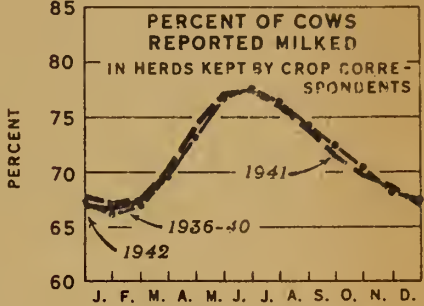
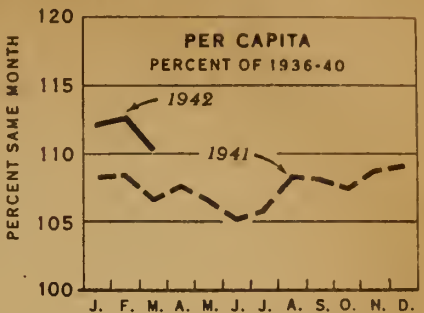
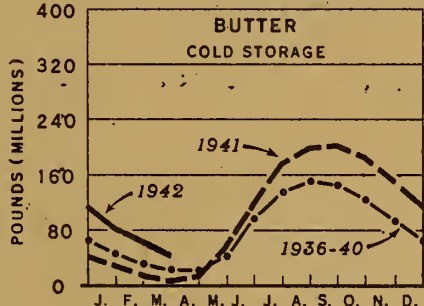
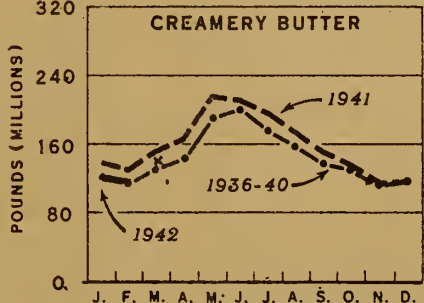
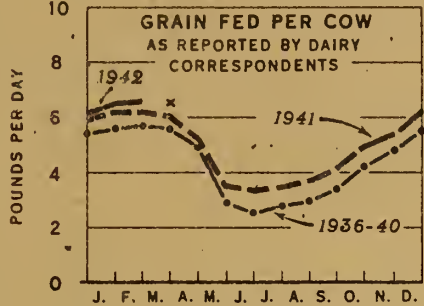
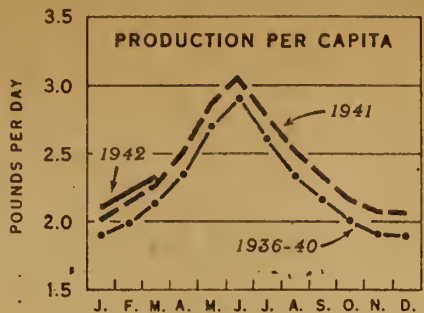
## MILK PRODUCTION FACTORS



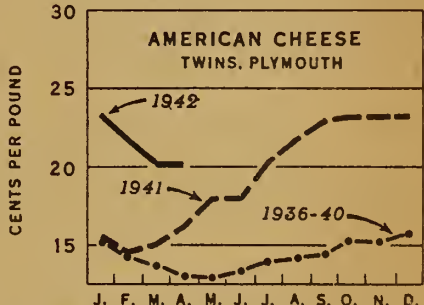
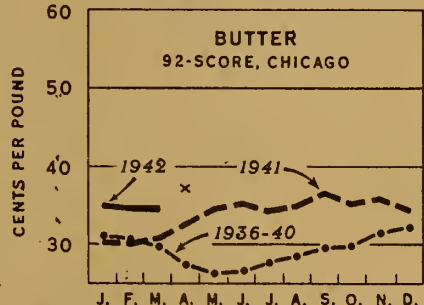
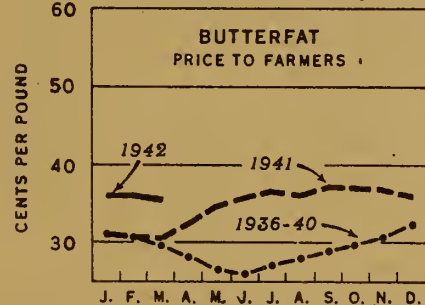
## DAIRY PRODUCTS MANUFACTURED



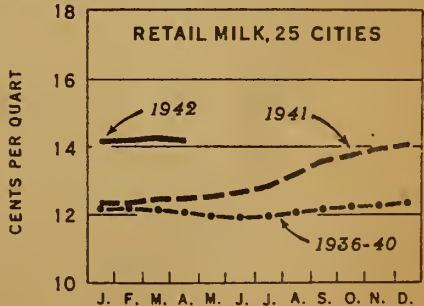
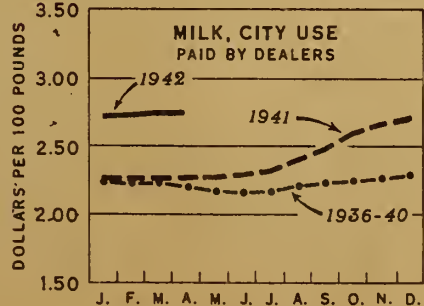
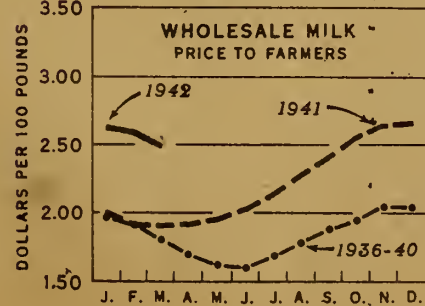
## STOCKS



## PRICES



## PRICE OF MILK



\* APPROXIMATION BASED ON INFORMATION AVAILABLE TO ABOUT 12TH OF CURRENT MONTH



UNITED STATES DEPARTMENT OF AGRICULTURE  
BUREAU OF AGRICULTURAL ECONOMICS

Dairy Production

April 16, 1942

SUMMARY OF DAIRY STATISTICS FOR THE UNITED STATES

		Average 1936-40	1941	1942	
				Total or average	Percent of prev. year
MILK PRODUCTION ON FARMS:					
Total, per month.....mil.lb.	Jan.	7,549	8,362	8,726 <u>a/</u>	104.4
	Feb.	7,245	7,935	8,288 <u>a/</u>	104.4
	Mar.	8,462	9,240	9,626 <u>a/</u>	104.2
Per capita, daily average..... lb.	Feb.	1,964	2,136	2,211 <u>a/</u>	103.5
	Mar.	2,101	2,245	2,317 <u>a/</u>	103.2
Per cow, per day..... lb. (As reported by crop correspondents)	Feb. 1	12.26	13.46	13.55	100.7
	Mar. 1	12.93	13.77	13.95	101.3
	Apr. 1	13.91	14.84	14.96	100.8
GRAIN FED PER COW..... lb. (As reported by dairy correspondents)	Mar. 1	5.70	6.20	6.58 <u>c/</u>	106.1
	Apr. 1	5.61	6.10	6.50 <u>c/</u>	106.6
PRODUCTION OF MANUFACTURED DAIRY PRODUCTS:					
Creamery butter, monthly.....mil.lb.	Feb.	115.3	130.1	118.8 <u>b/</u>	91.3
	Mar.	130.9	149.7	138.2 <u>a/</u>	92.3
weekly.....week ending	Apr. 9	-	-	-	92.8
American cheese, monthly..... mil. lb.	Feb.	29.5	37.1	58.1 <u>b/</u>	156.6
	Mar.	36.0	46.0	70.6 <u>a/</u>	153.5
weekly.....week ending	Apr. 9	-	-	-	153.1
Evaporated milk, case.,..... mil. lb.	Jan.	130.7	170.9	311.0	182.0
	Feb.	136.6	167.7	296.9	177.0
4 products, milk equivalent..... mil. lb. (Creamery butter x 21, all cheese except skim x 10, canned cond.& evap. milk x 2.2)	Jan.	3,210	3,736	3,939	105.4
	Feb.	3,138	3,617	3,877	107.2
	Mar.	3,629	4,241	-	106.3 <u>c/</u>
STOCKS ON HAND:					
Butter in cold storage..... mil. lb. (Including government holdings)	Mar. 1	32.2	16.5	63.7	386.1
	Apr. 1	23.0	9.0	44.9	498.9
Commercial holdings, only.....	Apr. 1	8.2	7.2	34.5	479.2
American cheese..... mil. lb. (Cold storage holdings)	Mar. 1	73.4	105.2	133.1	126.5
	Apr. 1	66.6	97.5	163.5	167.7
Commercial holdings, only	Apr. 1	66.6	97.5	106.9	109.6
Evaporated milk, case..... mil. lb. (Manufacturers' stocks)	Feb. 1	147.7	189.2	252.5	133.5
	Mar. 1	125.2	176.6	216.4	122.5
5 products, milk equivalent..... mil. lb. (Butter, all cheese, canned cond.& evap. milk plus cream in cold storage)	Feb. 1	2,371	2,374	4,168	175.6
	Mar. 1	1,874	1,988	3,610	181.6
	Apr. 1	1,576	1,645	3,459 <u>c/</u>	210.3
PRICES:					
Butter, wholesale, per pound..... ct. (92 score, Chicago)	Mar.	29.44	30.79	34.45	111.9
	Apr.	27.36	32.54	37.50 <u>d/</u>	115.2
American cheese, wholesale, per pound..... ct. (Twins, Plymouth, Wisconsin)	Mar. 15	13.70	15.00	20.25	135.0
	Apr. 15	12.95	16.25	20.25	124.6
Milk, wholesale, per 100 pounds..... dol. (All purposes, prices received by farmers)	Feb. 15	1.91	1.95 <u>b/</u>	2.58 <u>b/</u>	132.3
	Mar. 15	1.81	1.93	2.50 <u>a/</u>	129.5
Milk for city distribution, per 100 lbs. dol. (Prices paid by dealers, 3.5% basis)	Mar.	2.23	2.26	2.75	121.7
	Apr.	2.20	2.27	2.75 <u>a/</u>	121.1
Milk, retail delivered, per quart..... ct. (Average, 25 markets)	Mar.	12.15	12.45	14.26	114.5
	Apr.	12.04	12.47	14.24 <u>a/</u>	114.2

a/ Preliminary.  
b/ Preliminary revision.  
c/ Forecast or interpolation.  
d/ Price April 14.

mbp



# MILK PRODUCTION ON FARMS

Milk production in the United States for the month of March, estimated at 9.6 billion pounds, was 4 percent greater than a year earlier and was 14 percent above the March 1936-40 average. Increased numbers of milk cows on farms, together with mild weather in most of the country excepting the Western and several Southern States, and heavier than usual feeding of grain and concentrates contributed to the higher production level. The March production per capita was the highest for the month on record, the national average being 2.32 pounds per day compared with 2.24 pounds a year ago and 2.10 pounds for the March 1936-40 average.

## MONTHLY MILK PRODUCTION ON FARMS, UNITED STATES 1936-40 Average, 1941, and 1942

Month	Monthly total				Daily average per capita		
	Average :		1942 :		Average :		
	1936-40	1941	1942	1941	1936-40	1941	1942
	Million pounds				Pounds		
January	7,549	8,362	8,726	104	1.876	2.033	2.104
February	7,245	7,935	8,288	104	1.964	2.136	2.211
March	8,462	9,240	9,626	104	2.101	2.245	2.317
Jan.-Mar. Incl.	23,256	25,537	26,640	104.3	1.981	2.138	2.211
April	9,004	9,921			2.308	2.489	
May	10,741	11,711			2.664	2.842	
June	11,203	12,058			2.869	3.021	
July	10,395	11,250			2.575	2.725	
August	9,284	10,279			2.298	2.489	
September	8,348	9,240			2.134	2.310	
October	8,042	8,836			1.987	2.135	
November	7,369	8,200			1.880	2.046	
December	7,585	8,466			1.872	2.043	
Yearly Total	105,227	115,498			2.211	2.377	

Milk production per cow in herds kept by crop correspondents on April 1, while only slightly greater than a year ago, was record high for the date and was between 10 and 11 percent above the April 1, 1931-40 average. In the North Atlantic and East North Central groups of States, previous high records were exceeded, while in every major group of States the milk flow was well above the 10-year average for April 1. Production per cow in the South Central States was about 3 percent above average, but in all other groups, the production rate was 9 or more percent above average for the date.

Decreases from last year were reported in the West North Central group of States and in the West where pastures were retarded by cool March weather. Decreased production per cow in these groups, however, was more than offset by the increased production reported for the North Atlantic, South Atlantic, and East North Central States. Relatively mild weather and generally heavy feeding of grain have helped to maintain high production in these areas. Production per cow in the South Central group of States was not much changed from a year ago. Production showed more than the usual seasonal upturn in the important dairy States of Minnesota, Illinois, and New York.

The April 1 milk production per cow in herds kept by crop correspondents of the Nation averaged 14.96 pounds this year, 14.84 pounds last year, and 13.54 pounds for the 10-year average in the 1931-40 period. Of the cows in these herds, 69.9 percent were reported in production on April 1, compared with 70.1 percent a year earlier and 69.0 percent for the April 1, 1931-40 average.



## PASTURES

With moisture supplies ample in nearly all parts of the country, prospects for early dairy pastures this spring appear to be well above average. However, cool weather has delayed pasture development in the Pacific Coast States and in some of the Gulf States, two areas which are heavily weighted in determining the average condition of dairy pastures on April 1. Pasture condition for the areas where milk cows were on pasture averaged 75 percent of normal on April 1 compared with 78 percent a year earlier and 72 percent for the April 1, 1930-39 average.

In the Southern States, except Texas, pastures were generally off to a better start on April 1 than in either of the past two years, despite subnormal March temperatures along much of the Gulf Coast. Soils are generally well supplied with moisture in most of this area, and there were some local reports of excessive rains flooding lowland pastures. Since the first of April favorable growing weather has speeded the growth of grazing crops in much of this territory and the good rains in Texas probably went far to relieve the near-drought conditions there.

In the Western States new grass has developed slowly this spring because of cool weather and light spring rainfall. In Idaho, Arizona, Nevada, Oregon, and California April 1 pasture conditions were below average for the date and much lower than at the same time last year, when the season was unusually early. In the central and northern Great Plains area moisture conditions are unusually favorable for grass and prospects for spring pastures are excellent. For States in this area the April 1 pasture condition figures ranged from 5 to 21 points higher than at this time last year, and from 16 to 30 points above the 10-year average.

Pastures in the Northern States east of the Great Plains, although yet furnishing little feed for livestock, were well supplied with moisture and in excellent condition to develop with the advance of the season. April 1 condition figures were average or above in nearly all of these States and in the Corn Belt States were much better than on April 1 last year.

### NUMBER OF MILK COWS--PROSPECTIVE CHANGES

With the milk cows of the country already being pushed for heavier production than ever before, the rate of increase in cows tends to limit the increase in milk production that is feasible.

The increase in milk cows during 1941 was a little more than 3 percent. With about the same proportion of heifers coming into production and comparable numbers of heifer calves saved in 1941, it has been assumed that similar increases in milk cows might be expected in 1942 and 1943. The rate of increase, however, is about as much dependent on the number of cows culled out as it is on the number of heifers that become cows. As explained last month, the rate of culling is affected by feed supplies and by many other factors but seems to depend most on how the returns secured from dairying compare with those from other products being raised on the same farms. In the butterfat producing areas of the Western Corn Belt, the competition of hogs seems most important. Recently there have been indications that heavier culling might be expected and some signs that it had begun.

To aid in calculating the probable changes in the number of cows some of the records of milk cows, additions and disappearances are shown on page 8 by groups of States. If the number of heifers added to the herds and the number of cows lost or sold for slaughter are about as indicated, the increases in milk cows during both 1942 and 1943 would be between 2 and 3 percent. Conditions are changing so rapidly, however, that forecasts of this sort may need frequent revision.



## MILK PRODUCED PER MILK COW 1/

State and Div.	APRIL 1			
	Average 1931-40	1940	1941	1942
	Pounds			
Me.	13.0	13.6	13.8	14.7
N.H.	14.9	15.9	13.6	15.8
Vt.	14.6	15.1	15.4	16.6
Mass.	17.9	18.5	19.5	19.9
Conn.	17.1	17.9	17.6	18.9
N.Y.	17.4	19.3	19.3	20.8
N.J.	19.4	19.5	19.6	21.1
Pa.	17.1	17.8	18.1	19.0
N. ATL.	17.02	18.07	18.22	19.35
Ohio	15.0	15.4	15.2	16.0
Ind.	13.5	13.8	14.7	14.7
Ill.	14.6	15.8	16.1	16.6
Mich.	17.4	18.3	18.5	18.9
Wis.	17.2	18.4	19.1	19.6
E. N. CENT.	15.91	17.02	17.43	17.93
Minn.	17.4	18.7	19.6	19.6
Iowa	14.7	15.9	16.8	15.9
Mo.	9.3	9.2	9.9	9.7
N. Dak.	12.2	14.5	15.5	14.8
S. Dak.	11.2	12.5	13.1	12.7
Nebr.	13.6	14.4	14.4	14.4
Kans.	14.3	14.0	15.7	15.5
W. N. CENT.	13.57	14.76	15.33	14.80
Md.	13.8	15.7	15.0	16.3
Va.	9.8	10.5	10.9	10.6
W. Va.	9.1	9.2	8.6	9.8
N. C.	10.1	10.7	10.9	10.9
S. C.	9.8	9.6	9.9	11.0
Ga.	8.1	8.2	8.6	8.5
S. ATL.	9.93	10.22	10.69	11.11
Ky.	9.6	9.8	10.3	11.2
Tenn.	8.8	8.6	9.4	10.4
Ala.	7.6	7.5	8.0	8.6
Miss.	6.9	6.4	6.1	6.8
Ark.	7.8	7.7	8.5	7.7
Okla.	10.8	10.6	10.8	10.3
Tex.	9.3	8.8	9.1	8.3
S. CENT.	8.90	8.74	9.14	9.13
Mont.	12.5	14.6	15.0	14.3
Idaho	16.4	18.7	19.1	17.2
Wyo.	11.6	13.2	13.6	12.5
Colo.	13.5	15.0	16.0	15.5
Wash.	16.9	18.0	18.2	17.8
Oreg.	15.8	17.4	17.6	16.4
Calif.	19.8	21.0	20.2	20.3
WEST.	15.34	17.53	17.73	16.79
U. S.	13.54	14.45	14.84	14.96

1/ Averages represent the reported daily milk production of herds kept by reporters divided by the total number of milk cows (in milk or dry) in these herds. Figures for New England States are based on combined returns from crop and special dairy reporters. Figures for other States, regions, and U.S. are based on returns from crop reporters only. The regional averages are based in part on records of less important dairy States not shown separately, as follows: North Atlantic, Rhode Island; South Atlantic, Delaware and Florida; South Central, Louisiana; Western, New Mexico, Arizona, Utah and Nevada.



MILK COWS, HEIFERS ADDED AND MILK COWS DISAPPEARING, BY GROUPS OF STATES

NORTH ATLANTIC					EAST NORTH CENTRAL				
: No. per 100 milk cows :					: No. per 100 milk cows :				
:Milk cows:		:Heifer : Cows			:Milk cows:		: Heifer : Cows		
:on farms		:Heifers:	calves	:disappear-	:on farms		:Heifers	: calves	:disappear
:Jan. 1 a/:		1-2 b/:	b/	:ing c/	:Jan. 1 a/:		1-2 b/	: b/	:ing c/
	Thous.	Number	Number	Number		Thous.	Number	Number	Number
1921-27	3,238	14.6	15.0	16.2	5,403	17.6	18.2	17.6	
1928-33	3,101	17.8	19.1	16.4	5,606	19.5	20.9	16.6	
1934-37	3,180	18.3	19.2	18.9	6,075	18.5	20.6	19.9	
1938	3,171	19.2	20.3	18.5	5,906	19.2	22.3	18.1	
1939	3,192	19.5	22.1	18.6	5,971	20.4	23.6	18.9	
1940	3,222	21.3	21.0	20.1	6,061	21.6	24.1	19.4	
1941	3,259	20.5	21.1	19.5	6,191	22.2	24.6	19.3	
1942 d/	3,291	20.5	21.2	(20.0)	6,370	22.3	24.9	(19.0)	
1943 d/	(3,307)	(20.5)	(20.0)	(20.0)	(6,580)	(22.5)	(24.0)	(19.0)	
1944 d/	(3,324)				(6,810)				

WEST NORTH CENTRAL					SOUTH ATLANTIC				
: No. per 100 milk cows :					: No. per 100 milk cows :				
:Milk cows:		:Heifer : Cows			:Milk cows:		: Heifer : Cows		
:on farms		:Heifers:	calves	:disappear-	:on farms		:Heifers	: calves	:disappear
:Jan. 1 a/:		1-2 b/:	b/	:ing c/	:Jan. 1 a/:		1-2 b/	: b/	:ing c/
	Thous.	Number	Number	Number		Thous.	Number	Number	Number
1921-27	5,940	20.3	21.4	18.4	1,736	17.9	18.2	18.8	
1928-33	6,686	20.8	22.2	17.0	1,744	19.0	21.2	15.9	
1934-37	7,102	18.6	19.9	23.3	1,952	20.1	21.8	21.8	
1938	6,388	19.1	21.6	19.6	1,851	19.3	22.7	18.9	
1939	6,355	20.4	23.3	18.5	1,859	20.7	24.3	19.8	
1940	6,476	21.6	23.8	18.7	1,875	22.1	23.5	20.7	
1941	6,659	21.9	24.3	18.2	1,901	22.8	24.0	19.5	
1942 d/	6,907	21.8	24.8	(19.0)	1,965	22.1	24.2	(20.0)	
1943 d/	(7,050)	(22.0)	(23.0)	(20.0)	(2,006)	(22.5)	(23.5)	(19.0)	
1944 d/	(7,190)				(2,066)				

SOUTH CENTRAL					WESTERN				
: No. per 100 milk cows :					: No. per 100 milk cows :				
:Milk cows:		:Heifer : Cows			:Milk cows:		: Heifer : Cows		
:on farms		:Heifers:	calves	:disappear-	:on farms		:Heifers	: calves	:disappear
:Jan. 1 a/:		1-2 b/:	b/	:ing c/	:Jan. 1 a/:		1-2 b/	: b/	:ing c/
	Thous.	Number	Number	Number		Thous.	Number	Number	Number
1921-27	3,940	19.8	21.4	19.2	1,886	21.2	23.1	18.9	
1928-33	4,458	20.9	23.4	16.2	2,131	22.9	25.0	20.3	
1934-37	5,148	20.8	22.8	22.6	2,258	23.2	25.0	25.0	
1938	4,974	19.7	23.6	19.1	2,176	23.3	26.1	21.3	
1939	5,005	21.5	25.5	20.8	2,218	23.4	26.3	21.8	
1940	5,038	23.5	24.9	21.6	2,254	23.6	26.2	20.1	
1941	5,134	23.0	25.3	18.7	2,334	23.3	27.0	19.8	
1942 d/	5,355	22.5	25.7	(19.5)	2,415	24.1	27.7	(20.0)	
1943 d/	(5,515)	(22.5)	(25.0)	(20.0)	(2,510)	(24.5)		(20.5)	
1944 d/	(5,653)				(2,600)				

a/ Number of "cows and heifers 2 years or older, kept for milk."

b/ "Heifers 1 year old and under 2, kept for milk cows, on farms January 1." Also "heifer calves under 1 year kept for milk cows, on farms January 1," these latter being calves saved for milk cows in the preceding year and mostly on hand as heifers 1-2 in the following year.

c/ "Disappearance" as indicated by milk cows on farms January 1 plus heifers that became 2 years old during the year minus milk cows on hand at the end of the year. As thus computed it differs from total of culling and death losses where cows are sold for production or where dairymen purchase replacements.

d/ Numbers in parentheses are merely rough approximations of prospective numbers if conditions average somewhat less favorable for dairying than in 1941 and somewhat more favorable than in April 1942.





